



# California Air Resources Board

## California Renewable Electricity Standard

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Energy Action Plan Meeting  
December 15, 2009

## Executive Order S-21-09

- Adopt regulation for 33% renewable energy target
- Use AB 32 authority
- Build upon existing RPS program
- Regulate all California load serving entities
- Priority for resources that provide the greatest environmental benefit... developed quickly and support reliable, efficient, and cost-effective system operation... through the Western Interconnection

# Regulation Development Schedule

- **December 2009** – Draft regulatory language and preliminary technical analysis
- **January 2010** – Draft economic & environmental analyses, and operational reliability modeling
- **February 2010** – Revised regulatory language and staff report
- **March 2010** – Peer review of draft proposal
- **June 7, 2010** – Proposed regulation and staff report
- **July 22-23, 2010** – ARB Board Hearing

## October 30, 2009 Workshop

- Described Purpose & Authority for RES Regulation
- Outlined RES Rulemaking Schedule & Procedures
- Introduced RES Regulatory Concept Outline

# December 14, 2009 Workshop

- Load Forecast Revisions
- CPUC's 33% Implementation Analysis Update
- Renewables Integration Modeling Project
- Draft Approaches to RES Analyses Presented
  - ☐ Economic
  - ☐ Environmental
  - ☐ Technical Feasibility

# Proposed RES Regulatory Concepts

## RES Applicability

- Applies to electrical corporations, electricity service providers, community choice aggregators, electrical cooperatives, & local publicly owned electric utilities
- Effective January 1, 2012, and operate independently of California's RPS program
- Build upon and complement existing RPS program

# Proposed RES Regulatory Concepts

## Eligible Resources

- Incremental hydroelectric generation from efficiency improvements
- Fuel cells using renewable fuels
- Conduit hydroelectricity
- Municipal solid waste
- Small hydroelectric
- Solar photovoltaic
- Ocean thermal
- Solar thermal
- Tidal current
- Digester gas
- Ocean wave
- Geothermal
- Landfill gas
- Biodiesel
- Biomass
- Wind

- Staff may evaluate other technologies and current limitations on RPS eligible resources

# Proposed RES Regulatory Concepts

## RES Compliance Approach

- Based on verification of load served
- Basic measurement unit is MWh of electricity
- Potential MWh conversion to a GHG metric
- May create RES “compliance credits” based on “RECs”
- Credits may be traded or used for future compliance
- Annual or periodic compliance targets



# Proposed RES Regulatory Concepts

## Monitoring & Verification Issues

- Regulated Parties
- Agency Administration
- RES Implementation Guidelines
- Potential Roles

# Proposed RES Regulatory Concepts

## Compliance & Enforcement

- Compliance Requirements
- Compliance Determinations
- Enforcement Approach
- Penalties for Non-Compliance
- RES Procurement Planning
- Periodic Review

# Public Outreach Efforts

- Public workshops will be held every 6-8 weeks
- ARB holding meetings with stakeholders
- All interested parties are invited to comment
- Written comments will be posted on-line

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